A2

55. (Amended) The method of claim 54, wherein step (3) comprises the step of transmitting each of the plurality of data packets across a different path in a computer network.

Please add the following new claims:

A transmitting computer that transmits data packets to a receiving computer, wherein the transmitting computer comprises computer instructions that execute the step of, for each transmitted data packet, inserting a discriminator value for extraction by the receiving computer, wherein the discriminator value is generated on the basis of information previously shared with the receiving computer;

- 69. The transmitting computer of claim 68, wherein the transmitting computer further comprises computer instructions that insert as the discriminator value an Internet Protocol address into a header portion of each data packet.
- 70. The transmitting computer of claim 68, wherein the transmitting computer transmits information to the receiving computer sufficient to establish the set of valid discriminator values.
- 71. A method of transmitting data packets from a first computer to a second computer, comprising the steps of:
 - (i) determining a sender's Internet Protocol (IP) address selected from a first set of IP addresses allocated to the hirst computer;
 - determining a receiver's IP address selected from a second set of IP addresses allocated to the second computer;
 - (iii) creating a packet header comprising the sender's and receiver's IP addresses; and

√_Qγ

(ii)

-2

AB

- (iv) the first computer transmitting to the second computer a data packet comprising the packet header.
- 72. The method of claim 71, wherein the first and second sets of addresses are mutually exclusive.
- 73. The method of claim 71, wherein in steps (i) and (ii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.
- 74. A method of transmitting data packets between a first computer and a second computer, comprising the steps of:
 - the second computer receiving a data packet including a packet header comprising a first sender Internet Protocol (IP) address and a first receiver IP address;
 - (ii) determining a second sender IP address selected from a first set of IP addresses allocated to the first computer;
 - (iii) determining a second receiver IP address selected from a second set of IP addresses allocated to the second computer;
 - (iv) accepting the packet when first and second sender IP addresses match and first and second receiver IP addresses match, otherwise, rejecting the packet.
- 75. The method of claim 76, wherein the first and second sets of IP addresses are mutually exclusive.
- 76. The method of claim 74, wherein in steps (ii) and (iii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.
 - 77. The method of claim 76, further comprising the step of maintaining a window of

IP address pairs corresponding to a sequence of IP address pairs generated by the pseudo-random algorithm, and

wherein step (iv) accepts any data packet whose packet header IP addresses match any of the IP address pairs presently in the window.

- 78. A receiving computer that receives data packets from a transmitting computer, wherein the receiving computer comprises computer instructions that execute the steps of:
 - receiving data packets from a transmitting computer including a packet header comprising a first sender Internet Protocol (IP) address and a first receiver IP address;
 - (ii) for each data packet, determining a second sender IP address selected from a first set of IP addresses allocated to the first computer;
 - (iii) for each data packet, determining a second receiver IP address selected from a second set of IP addresses allocated to the second computer;
 - (iv) for each data packet, accepting the packet when first and second sender IP addresses match and first and second receiver IP addresses match, otherwise, rejecting the packet.
- 79. The receiving computer of claim 78, wherein the first and second sets of IP addresses are mutually exclusive.
- 80. The receiving computer of claim 78, wherein in steps (ii) and (iii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.
- 81. The receiving computer of claim 80, wherein the receiving computer maintains a window of valid second IP address pairs, wherein the window is moved in response to detecting

matches.

- 82. A transmitting computer that transmits data packets to a receiving computer, wherein the transmitting computer comprises computer instructions that execute the steps of:
 - (i) determining a sender's IP address selected from a first set of IP addresses allocated to the first computer;
 - (ii) determining a receiver's IP address selected from a second set of IP addresses allocated to the second computer;
 - (iii) creating a packet header comprising the sender's and receiver's IP addresses; and
 - (iv) the first computer transmitting to the second computer a data packet comprising the packet header.
- 83. The transmitting computer of claim 82, wherein the first and second sets of IP addresses are mutually exclusive.
- 84. The transmitting computer of claim 82, wherein in steps (i) and (ii) the IP address determination is based on a pseudo-random algorithm that selects an IP address pair.

Remarks

Applicants have amended claims 44 and 55 to fix typographical and clerical errors. Applicants have added new claims 68-84 to more completely claim the disclosed invention. Support for the new claims may be found at least on pages 21-24.